

IN THE CLAIMS:

Please amend claims 1-9 and 11-13 as follows.

1. (Currently Amended) An apparatus, comprising:

an address management entity comprising at least one queue configured to hold released addresses, said address management entity configured to;

~~a detector configured to detect that a packet has been addressed to a released address held in the at least one queue, and~~

~~a returner configured to return the held address to which the packet has been addressed to an end of the at least one queue.~~

2. (Currently Amended) The apparatus according to claim 1, ~~further comprising:~~

wherein said address management entity is further configured to

~~said detector being further configured to detect that an address of a user has been released;~~ and

~~an adder configured to add the released address to the end of the at least one queue.~~

3. (Currently Amended) The apparatus according to claim 2, ~~further comprising:~~

wherein said address management entity is further configured to

~~a classifier configured to~~ classify the released address into a group out of at least two address groups, each address group of the at least two address groups having its own queue holding released addresses; and

~~an adder configured to~~ add the released address to an end of the queue of the classified group, the queues being given a priority order for re-assigning the released addresses held in the queues.

4. (Currently Amended) The apparatus according to claim 1, further comprising:

wherein said address management entity is further configured to ~~a transmitter configured to~~ send an error notification to a source of a packet upon detection that a packet has been addressed to the released address held in the at least one queue.

5. (Currently Amended) The apparatus according to claim 1, ~~wherein the detector is configured to~~ wherein said address management entity is further configured to detect that a packet has been addressed to the released address held in the at least one queue by receiving the packet addressed to the released address.

6. (Currently Amended) The apparatus according to claim 2, ~~wherein the detector is configured to~~ wherein said address management entity is further configured to detect that an address of a user has been released by detecting a loss of a connection which releases its address.

7. (Currently Amended) The apparatus according to claim 1, ~~wherein the detector is configured to~~ wherein said address management entity is further configured to detect that a packet has been addressed to the released address held in the at least one queue by receiving an error notification indicating an unused address.

8. (Currently Amended) The apparatus according to claim 2, ~~wherein the detector is configured to~~ wherein said address management entity is further configured to detect that an address of a user has been released by receiving a notification thereon.

9. (Currently Amended) An apparatus, comprising:
an address management entity configured to
~~a receiver configured to~~ receive a packet addressed to an unused address, and
~~a transmitter configured to~~ send an error notification to a network node configured to manage addresses, the error notification indicating the unused address.

10. (Previously Presented) The apparatus according to claim 9, wherein the error notification causes a return of a released address held in a queue and corresponding to the unused address to an end of the queue, the queue holding released addresses.

11. (Currently Amended) The apparatus according to claim 9, ~~further comprising:~~
wherein said address management entity is further configured to

~~a detector configured to detect a loss of a connection which releases its address,~~
and

~~wherein said transmitter is configured to send a notification about the released~~
address to the network node configured to manage addresses.

12. (Currently Amended) The apparatus according to claim 9, wherein said
address management entity is further configured to

~~said transmitter is configured to send an error notification to a source of the packet~~
upon receipt of the packet addressed to the unused address.

13. (Currently Amended) A system, comprising:

a first network node configured to manage addresses, the first network node
comprising, at least one queue configured to hold released addresses, said first network
node configured to

~~a detector configured to detect that a packet has been addressed to a released~~
address held in the at least one queue, and

~~a returner configured to return the held address to which the packet has been~~
addressed to an end of the at least one queue; and

a second network node configured to

forward IP data packets, ~~the second network node comprising,~~
~~a receiver configured to receive a packet addressed to an unused address, and~~
~~a transmitter configured to send an error notification to the first network~~
node, the error notification indicating the unused address.

14. (Previously Presented) A method, comprising:
detecting that a packet has been addressed to a released address held in a queue
holding released addresses; and
returning the held address, to which the packet has been addressed, to an end of
the queue.

15. (Previously Presented) A method, comprising:
receiving a packet addressed to an unused address; and
sending an error notification to a network node configured to manage addresses,
the error notification indicating the unused address.

16. (Previously Presented) The method according to claim 15, wherein sending
the error notification further comprises causing a return of a released address held in a
queue and corresponding to the unused address to an end of the queue, the queue holding
released addresses.

17. (Previously Presented) A computer-readable program distribution medium encoding a computer program of instructions being configured to control a processor to perform:

detecting that a packet has been addressed to a released address held in a queue holding released addresses; and

returning the held address, to which the packet has been addressed, to an end of the queue.

18. (Previously Presented) The computer program according to claim 17, further comprising:

a computer-readable medium on which the computer program of instructions are stored.

19. (Previously Presented) The computer program according to claim 17, wherein the computer-readable distribution medium is configured to be directly loadable into an internal memory of the computer.

20. (Previously Presented) An apparatus, comprising:

holding means for holding released addresses;

detecting means for detecting that a packet has been addressed to a released address held in the at least one holding means; and

returning means for returning the held address to which the packet has been addressed to an end of the at least one holding means.

21. (Previously Presented) An apparatus, comprising:
receiving means for receiving a packet addressed to an unused address; and
sending means for sending an error notification to a network node configured to manage addresses, the error notification indicating the unused address.

22. (Previously Presented) A system, comprising:
managing means for managing addresses;
holding means for holding released addresses;
detecting means for detecting that a packet has been addressed to a released address held in the holding means;

returning means for returning the held address to which the packet has been addressed to an end of the at least one holding means;

receiving means for receiving a packet addressed to an unused address; and
sending means for sending an error notification to the managing means, the error notification indicating the unused address.